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January 17, 2006

4329.02

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey, C.E.G.

Subject: Groundwater Monitoring Report; Fourth Quarter 2005
W & S Enviro; Redwood Village Texaco
723 South Fortuna Boulevard, Fortuna, California; LOP No: 12551

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) presents the results of groundwater monitoring for the fourth quarter of 2005 at the Redwood Village Texaco located in Fortuna, California. This report has been prepared for W & S Enviro.

Please call (707) 443-5054 if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

Caroline Levenda
Staff Geologist

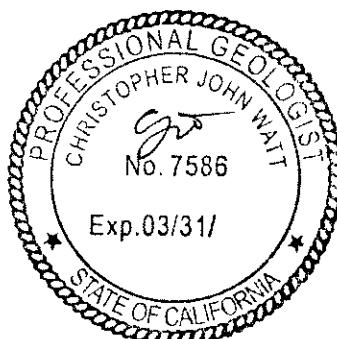
CJL:jg

Attachments

cc: Jim Seiler, W & S Enviro (electronically sent)

P:\4000\4329 HPI R-Village Texaco\Submittals\GMRs\2005\4Q05\4329.02_4Q05_GMR.doc

Christopher Watt
PG 7586, Exp. 03/31/06



GROUNDWATER MONITORING REPORT; FOURTH QUARTER 2005

Redwood Village Texaco; 723 South Fortuna Boulevard, Fortuna, California
LOP No. 12551; LACO Project No. 4329.02

INTRODUCTION:

Field activities were conducted on November 2, 2005, in accordance with generally accepted practices at this or similar locations. Details of the quarterly sampling parameters are presented below in Table A. A location map and site plan are included as Figures 1 and 2, respectively. Field sampling reports are included as Attachment 1.

TABLE A Quarterly Sampling Parameters: November 2, 2005, Sampling Event

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	DEPTH TO BOTTOM OF SCREEN (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ANALYTICALS	SAMPLING SCHEDULE		
						ORGANICS			
MW4	3-10	6.31	9.67	DHP	ORP, DO	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly		
MW5	15-24.1	23.53	23.93	3/4" B - No Purging	NA				
MW6	3-10	DRY	9.57	NA	NA				
MW7	15-26.3	26.3	26.13						
MW8	10-15	14.71	13.68						
MW9	5-10	9.49	8.90						
MW10	5-10	9.51	8.94						
MW11	5-10	9.17	8.65	3/4" B - No Purging	NA				
MW12	28-30.9	28.58	30.73						
MW13	5-10	8.76	8.69		TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA				
MW14	5-10	9.38	8.73	NA				NA	
MW15	5-10	9.12	8.83	3/4" B - No Purging				NA	
MW16	4-14	13.85	13.05	NA	NA	TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA	Quarterly		
MW17	4-14	14.08	13.03	NA	NA				
MW18	4-14	12.99	13.10	3/4" B - No Purging	NA				

SITE CHRONOLOGY:

- **1984:** The Redwood Village Texaco station was built on raw agriculture property; it is believed that this is the time the three underground storage tanks (USTs) were installed.
- **1990:** Humboldt Petroleum, Incorporated purchased the subject property.
- **1996:** Three 10,000-gallon gasoline USTs were removed and replaced with two new, steel, fiberglass-coated, double-walled tanks and fiberglass piping. Approximately 710 tons of petroleum impacted soil was excavated from the tank cavity.
- **1998:** Three monitoring wells were installed.
- **1999:** Four borings were installed. The field geologist observed two distinct aquifers separated by an aquitard.
- **2000:** Five monitoring wells were installed and the previously installed monitoring wells (MW1 through MW3) were destroyed.
- **2001:** Seventeen borings were installed to further delineate the petroleum hydrocarbon plume.
- **2002:** Monitoring wells MW9 through MW15 were installed. LACO's *Corrective Action Plan* was submitted.
- **2004:** Sixteen borings were installed to monitor the petroleum hydrocarbon plume stability. LACO's *Remedial Action Plan* was submitted.
- **2005:** Monitoring wells MW16, MW17, and MW18 were installed.

HYDRAULIC GRADIENT AND HYDROGEOLOGY

In previous monitoring events, the hydraulic gradients for both shallow and deep water-bearing units have been typically calculated using the three-point method and hydraulic head elevations. However, the hydraulic gradient was not calculated due to erroneous hydraulic head measurements described below. Historic hydraulic head data are included in Table 1 and historic hydraulic gradients are presented in Table 2. Hydraulic heads for monitoring wells are provided in Figure 3.

For the current reporting period, the groundwater elevations in shallow and deep wells vary approximately 13 to 17 feet between adjacent wells. Specifically, the groundwater in monitoring well MW12 (deep well), located adjacent to monitoring well MW8 (shallow well), is

approximately 13.5 feet higher in elevation than monitoring well MW8. Similar conditions occur throughout the site.

Following a review of site stratigraphy, we evaluated individual monitoring well constructions to determine the cause of hydraulic head elevation variations during this monitoring event. Figures 4 through 11 represent individual monitoring well constructions. Screen lengths of 5, 10, or 15 feet are constructed using the entirety of the well screen, which includes approximately 6 inches of riser or non-slotted screen (Figures 8, 9, and 11); screen lengths are manufactured as 5- or 10-foot lengths. The female bottom plug is also approximately 6 inches long and threads into the bottom of the screen (Figures 8, 9, and 11). Therefore, up to approximately 12 inches of blank PVC exists at the base of monitoring wells MW8, MW9 through MW11, MW13 through MW15, and MW16 through MW19. Alternatively, screen lengths that do not utilize the entirety of the well screen are cut to fit the appropriate screening interval. The bases of these screens are capped with a slip cap approximately 2 inches higher resulting in a well screen that extends to nearly the entire depth of the well (Figures 4 through 7 and Figure 10). Consequently, the 12 inches of blank PVC at the bottom of monitoring wells MW8, MW9 through MW11, MW13 through MW15, and MW16 allows groundwater to pool within that 12 inches while groundwater may actually be significantly below the bottom of the well. The depth-to-water measurements have been misinterpreted as actual hydraulic head measurements of the water table. As shown in Table A, if the depth-to-water value is *less than* the depth to the bottom of the screen, then the measurement is most likely the actual hydraulic head. When the depth-to-water value is *greater than* the depth to the bottom of the screen, then the measurement taken is most likely trapped water in the bottom of the well and, therefore, not representational of actual hydraulic head. The hydraulic gradients will be calculated when at least three actual hydraulic head measurements are collected in the shallow and deep aquifers.

LABORATORY RESULTS AND DISCUSSION

Analyte concentrations in groundwater for the current sampling event are included in Figure 12 and below in Table B. Historical groundwater analytical results are summarized in Table 1. A copy of the laboratory report for the current event is included as Attachment 2.

Table B: Laboratory Analytical Results for November 2, 2005

WELL	TPHg ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)
MW4	2,200	4.5	ND<0.50	23	1.5	500	270	30	2.5
MW5	ND<50	ND<0.50	0.94	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0
MW6					Dry				
MW7						DTW Only			
MW8							DTW Only		
MW9							DTW Only		
MW10							DTW Only		
MW11							DTW Only		
MW12							DTW Only		
MW13	390	0.98	0.8	3.3	4.7	ND<1.0	ND<10	ND<1.0	ND<1.0
MW14						Insufficient Amount of Water			
MW15	2,300	9.2	0.89	69	46	14	ND<45	ND<1.0	ND<1.0
MW16						DTW Only			
MW17						DTW Only			
MW18	3,500	190	5.5	80	177	55	19	4.7	ND<1.0

The laboratory noted that samples collected from monitoring wells MW4, MW15, and MW18 include the reported gasoline components and additives in addition to other peaks in the gasoline range. The laboratory also noted that the groundwater sample collected from monitoring well MW13 does not present a peak pattern consistent with that of gasoline. Additional laboratory results are included in the case narrative found in Attachment 2.

DISCUSSION

Laboratory results for groundwater samples analyzed from the monitoring wells are generally consistent with historic analyte concentrations (Table 1). For the current sampling event, groundwater samples were not collected from monitoring wells MW7 through MW12 and MW14. Monitoring well MW6 was dry. The groundwater samples collected from monitoring wells MW5, MW13, MW15, and MW18 were retrieved using $\frac{3}{4}$ -inch bailers. Depth-to-water measurements in monitoring wells MW13 and MW15 were below the bottom of the screen interval and were not purged due to lack of water present in well. Depth-to-water measurements in monitoring wells MW5 and MW18 were slightly above the bottom of the well screen and were not purged due to lack of water present in the well. Thus, the groundwater samples collected from these wells are likely not representative of saturated conditions in the aquifer.

Groundwater samples collected from the current sampling event are described below:

- **Monitoring Well MW4** - The groundwater samples collected from monitoring well MW4 have detections of total petroleum hydrocarbons as gasoline (TPHg); benzene,

toluene, ethylbenzene, and xylenes (BTEX); methyl tertiary buty ether (MTBE); tertiary butyl alcohol (TBA); tertiary amyl methyl ether (TAME); and ethyl tertiary butyl ether (ETBE) within the same order of magnitude (OOM) as the previous event and within the same OOM as November 2004.

- **Monitoring Well MW5** - The groundwater samples collected from monitoring well MW5 have been reported as being below the California Regional Water Quality Control Board (CRWQCB) Water Quality Objectives (WQOs) since August 2004 for all analytes. However, concentrations for the current sampling event may not be representative of saturated aquifer conditions as discussed above.
- **Monitoring Well MW13** - The groundwater sample collected from monitoring well MW13 has detections of TPHg above the CRWQCB WQO of 50 ug/L and below the WQOs for BTEX. The current groundwater sample is within the same OOM as the last sampling event on this monitoring well, which was completed in May 2005. However, concentrations for the current sampling event may not be representative of saturated aquifer conditions as discussed above.
- **Monitoring Well MW15** - The groundwater sample collected from monitoring well MW15 is reported as within the same OOM for TPHg as the previous sampling event and for historical sampling events. Benzene has decreased two OOMs since sampling was initiated in July 2002 and is above the WQO of 1 ug/L. Toluene has been detected below the WQO of 42 ug/L since February 2003. Ethylbenzene and total xylenes have been detected above the WQOs of 29 ug/L and 42 ug/L, respectively, since sampling was initiated in this well in July 2002. However, concentrations for the current sampling event may not be representative of saturated aquifer conditions as discussed above.
- **Monitoring Well MW18** - The groundwater sample collected from monitoring well MW18 has been reported above the WQO for TPHg (50 ug/L), and within the same OOM as the previous sampling event. TPHg is also within the same OOM as the sampling event completed in November 2004, same season. Benzene was detected above the WQO of 1 ug/L and one OOM higher than the previous sampling event. Toluene has been detected below the WQO of 42 ug/L since February 2005. Ethylbenzene and total xylenes were detected above the WQOs of 29ug/L and 42ug/L, respectively. Ethylbenzene decreased one OOM since the previous sampling event. Total xylenes remained within the same OOM as the previous sampling event. MTBE was detected above the WQO of 13 ug/L for the current sampling event.

However, concentrations for the current sampling event may not be representative of saturated aquifer conditions as discussed above.

RECOMMENDATIONS

- The next sampling event is scheduled for January 2006. Monitoring wells MW4 through MW18 will be sampled biannually during the wet season in the months of February and May. However, if depth-to-groundwater is below the screen interval, groundwater samples will not be collected.
- Hydraulic gradients will be calculated when groundwater elevations have reached the screen intervals of the monitoring wells; this may likely occur during the wet season.
- Remediation implementation is pending approval of a Pay for Performance proposal by the Underground Storage Tank Cleanup Fund.

LIMITATIONS

LACO ASSOCIATES has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this report is current and accurate. LACO ASSOCIATES disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising there from, whether attributable to inadvertence or otherwise. LACO ASSOCIATES makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. LACO ASSOCIATES assumes no responsibility of any third party reliance on the data presented and that data generated for this report represents information gathered at that time and at the indicated locations. It should not be utilized by any third party to represent data for any other time or location. The report is valid solely for the purpose, site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

LIST OF FIGURES, TABLES, AND ATTACHMENTS

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Figure 2: Site Map
Figure 3: Hydraulic Head Map (11/12/05)
Figure 4: Monitoring Well MW-4 Construction Diagram
Figure 5: Monitoring Well MW-5 Construction Diagram
Figure 6: Monitoring Well MW-6 Construction Diagram

Figure 7: Monitoring Well MW-7 Construction Diagram
Figure 8: Monitoring Well MW-8 Construction Diagram
Figure 9: Monitoring Wells MW- 9 through MW-11, MW-13 through MW-15 Construction Diagram
Figure 10: Monitoring Well MW-12 Construction Diagram
Figure 11: Monitoring Well MW-16 through MW-19 Construction Diagram
Figure 12: Analyte Concentrations in Groundwater (11/02/05)

Table 1: Groundwater Analytical Results

Table 2: Historical Hydraulic Gradient Data

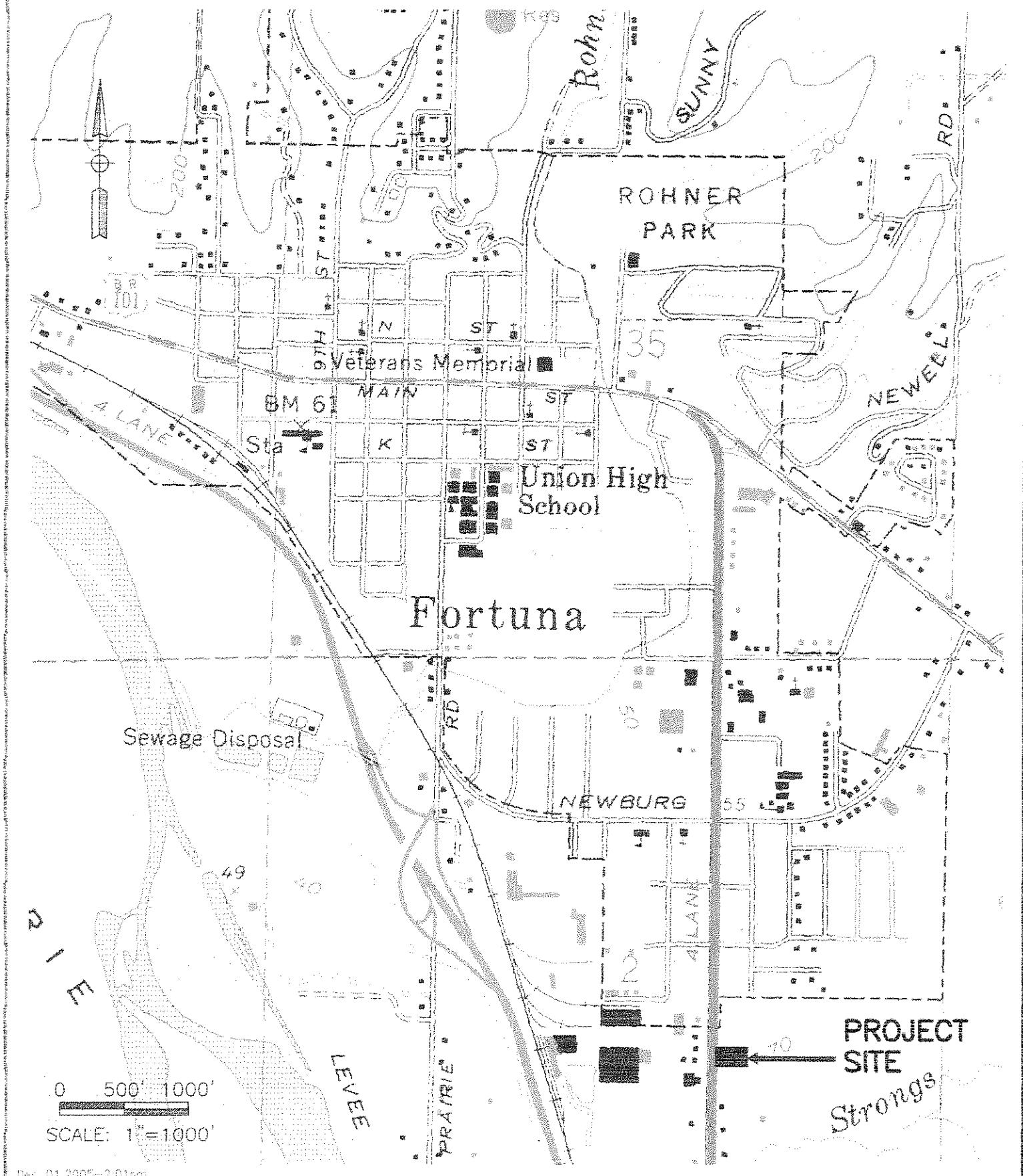
Attachment 1: Field Sampling Forms

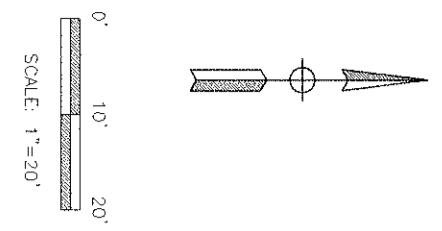
Attachment 2: Copy of Current Laboratory Analytical Report



LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	12/01/05	1
LOCATION	R. VILLAGE TEXACO	CHECK	CC	JOB NO.
LOCATION MAP		SCALE	1"=1000'	4329.02





SCALE: 1"=20'

LEGEND

- (W) — (W) — ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
- (E) — (E) — ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
- (S) — (S) — SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)
- (D) — (D) — STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
- (U) — (U) — UNDIFFERENTIATED UTILITY (NORCAL GEO. CONSULTANTS INC.)

DESTROYED MONITORING WELL
MONITORING WELL (SHALLOW)
MONITORING WELL (DEEP)

58.00 HYDRAULIC HEAD ELEVATION

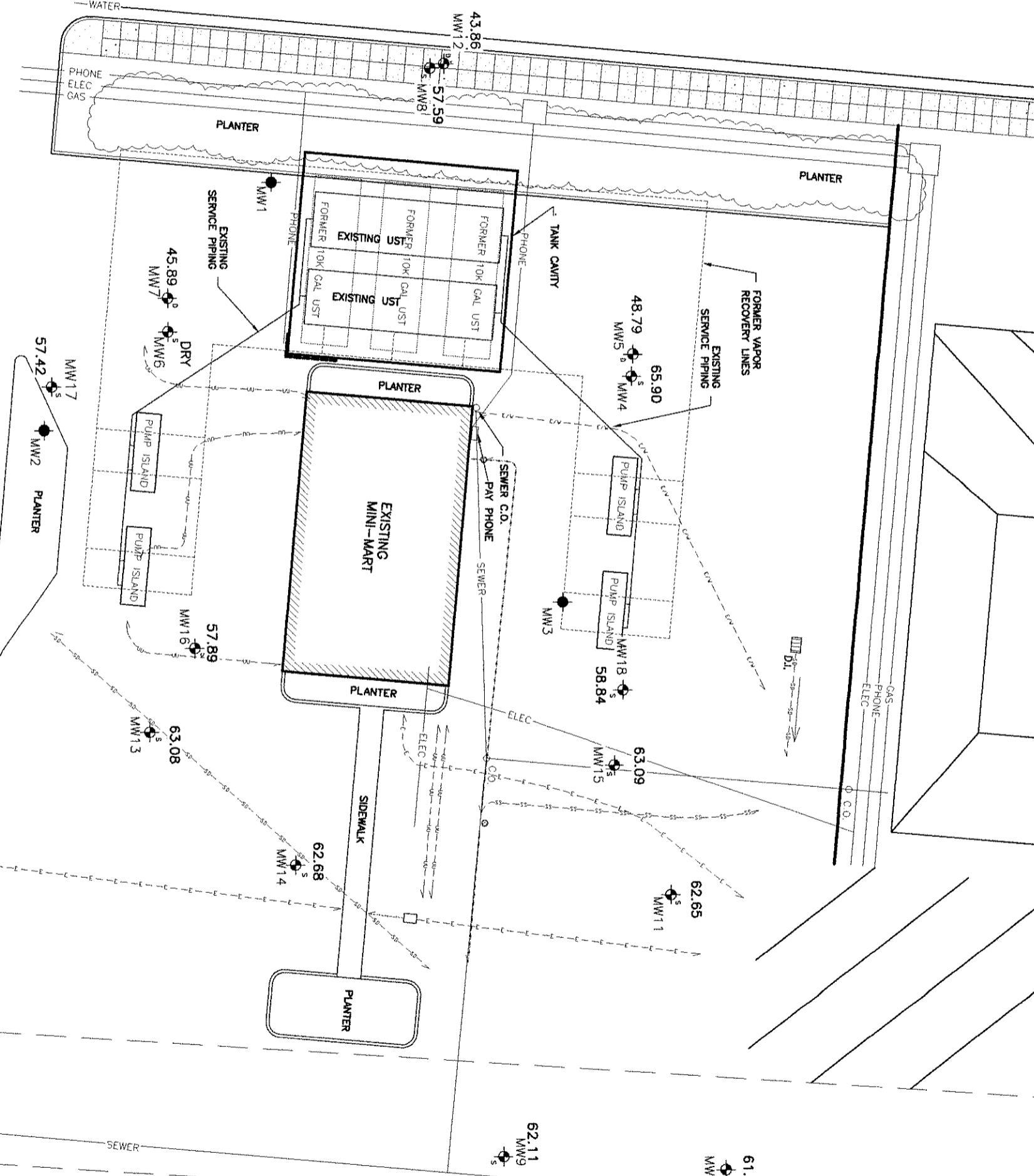
WATER

PLANTER

DRIVEWAY

D.I.

SOUTH FORTUNA BLVD.



NO.	REVISION	BY	CHK	DATE

GROUNDWATER MONITORING REPORT				
HYDRAULIC HEAD MAP (1/12/05)				
SCALE	1"=20'	DRAWN	R.M.	
CHECK	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DATE 12/01/05
JOB NO.	4329.02	FIGURE	3	

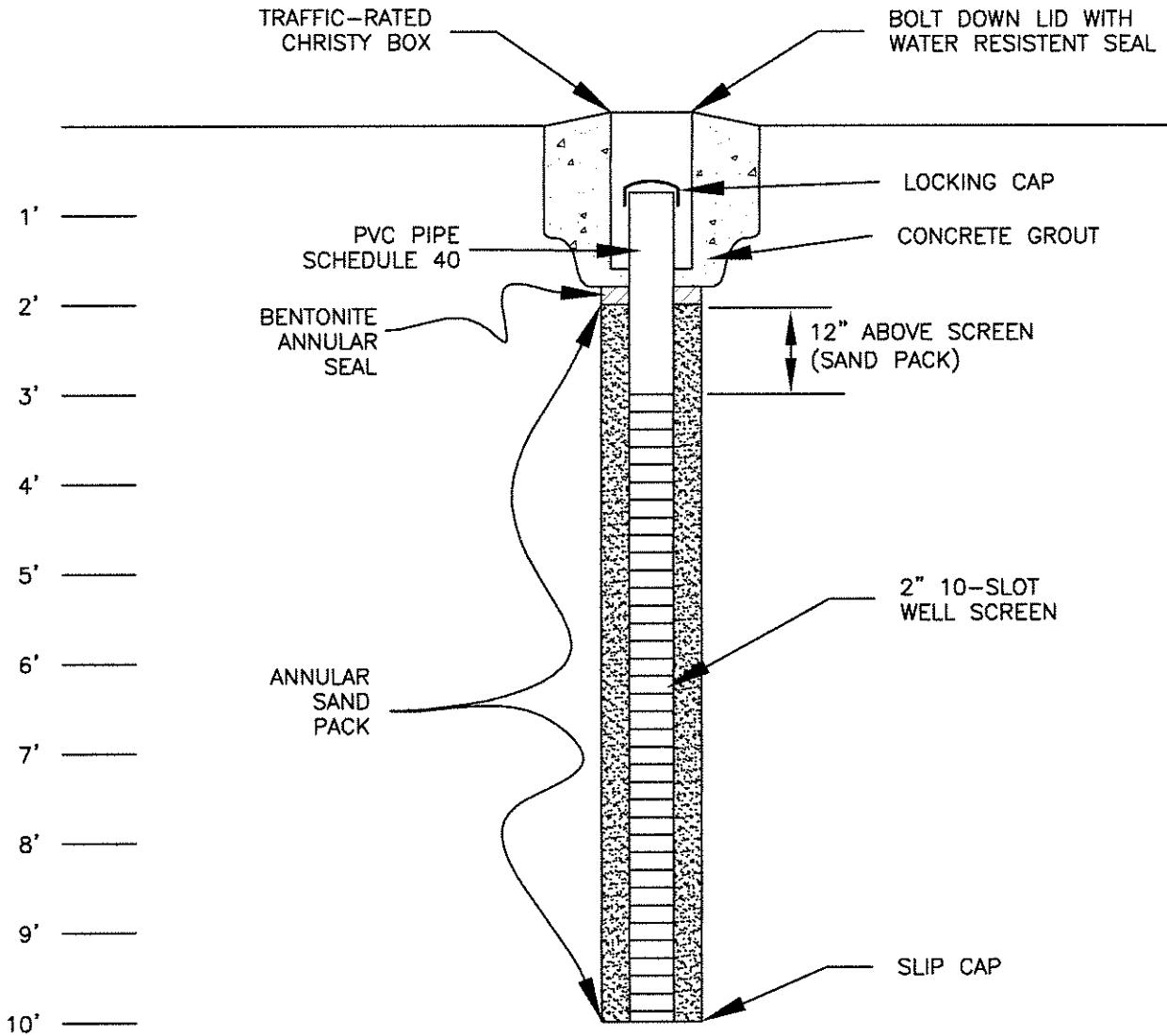
LAGO ASSOCIATES
CONSULTING ENGINEERS
21 W. 4TH ST. EUREKA, CA 95501 (707)443-5054

W & S ENVRO
R VILLAGE TEXACO, FORTUNA



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CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

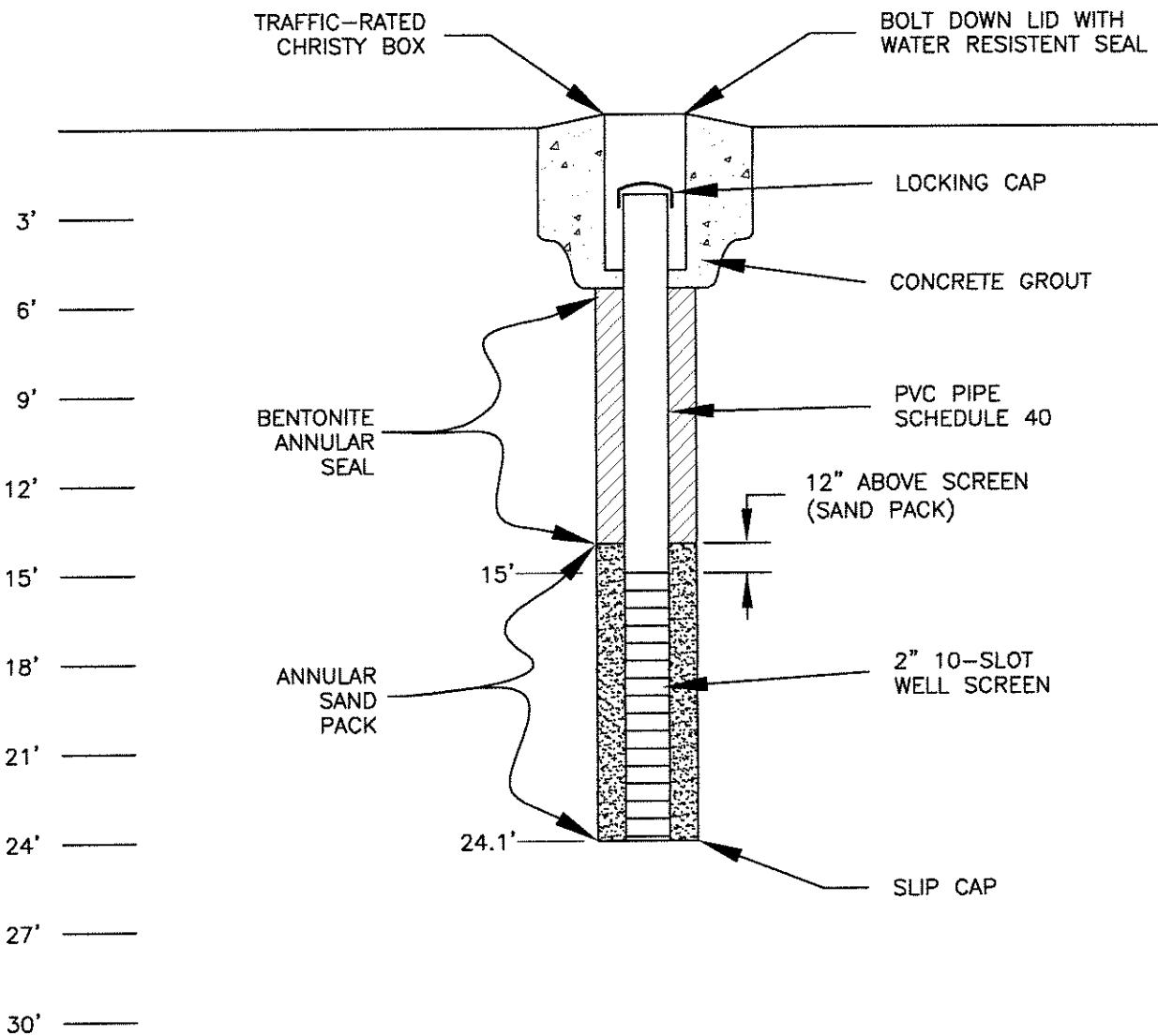
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	4
LOCATION	R. VILLAGE TEXACO	CHECK	<i>cc</i>	JOB NO.
MONITORING WELL MW-4 (SCREENED 3 TO 10 feet bgs)	SCALE	AS SHOWN		4329.02





LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

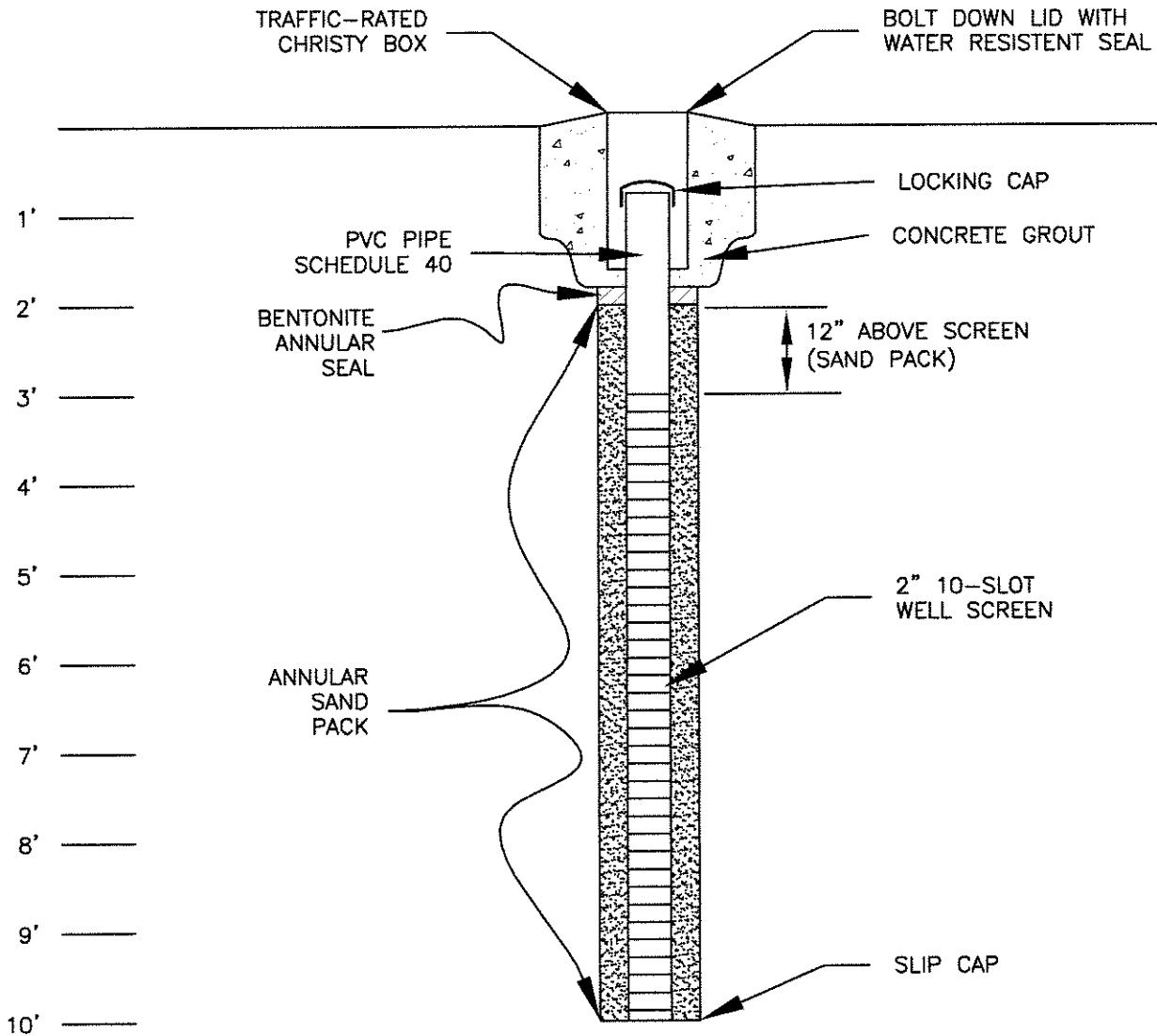
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	5
LOCATION	R. VILLAGE TEXACO	CHECK	cc	JOB NO.
	MONITORING WELL MW-5 (SCREENED 15 TO 24.1 feet bgs)	SCALE	AS SHOWN	4329.02





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21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

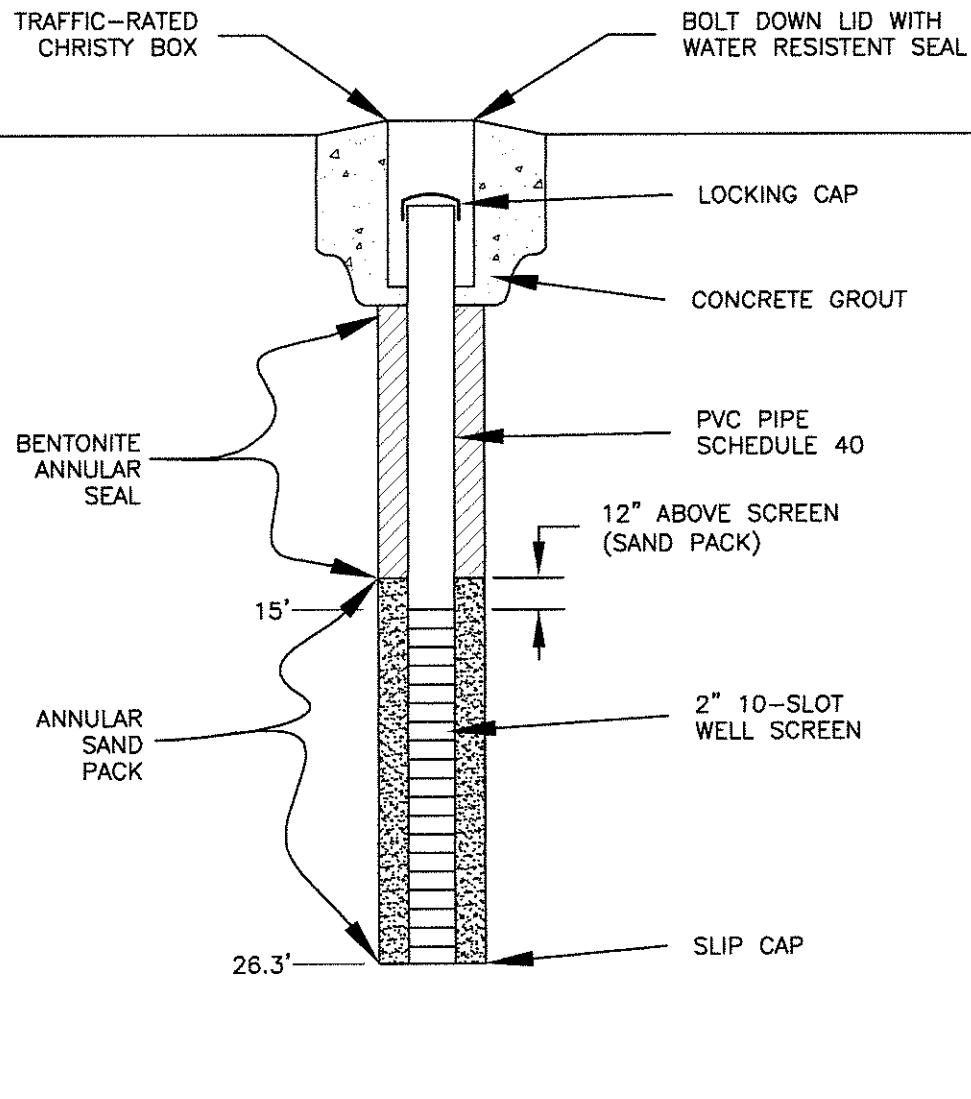
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	6
LOCATION	R. VILLAGE TEXACO	CHECK	<i>a</i>	JOB NO.
MONITORING WELL MW-6 (SCREENED 3 TO 10 feet bgs)	SCALE AS SHOWN			4329.02





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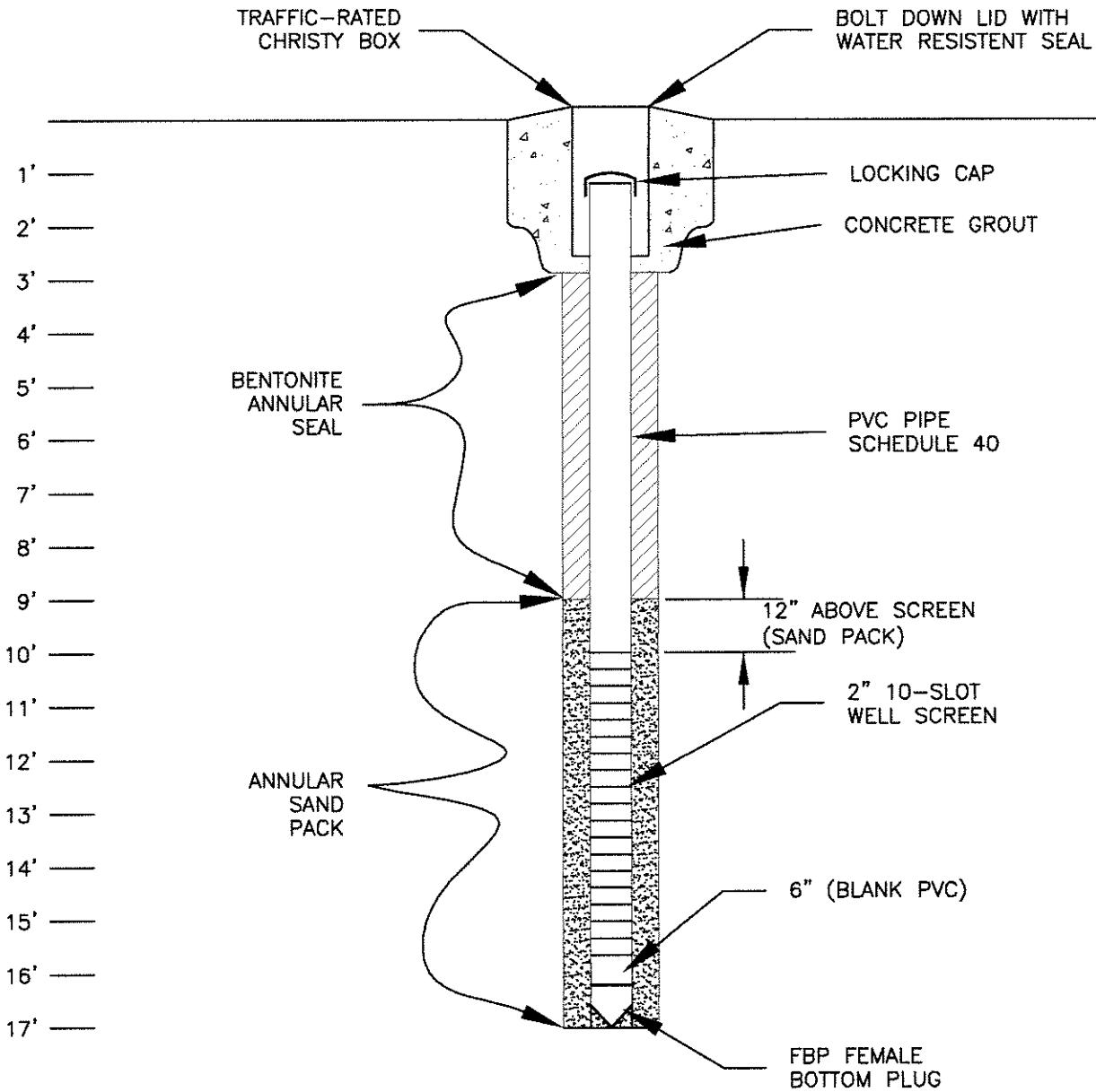
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	7
LOCATION	R. VILLAGE TEXACO	CHECK	<i>cc</i>	JOB NO.
MONITORING WELL MW-7 (SCREENED 15 TO 26.3 feet bgs)	SCALE AS SHOWN			4329.02





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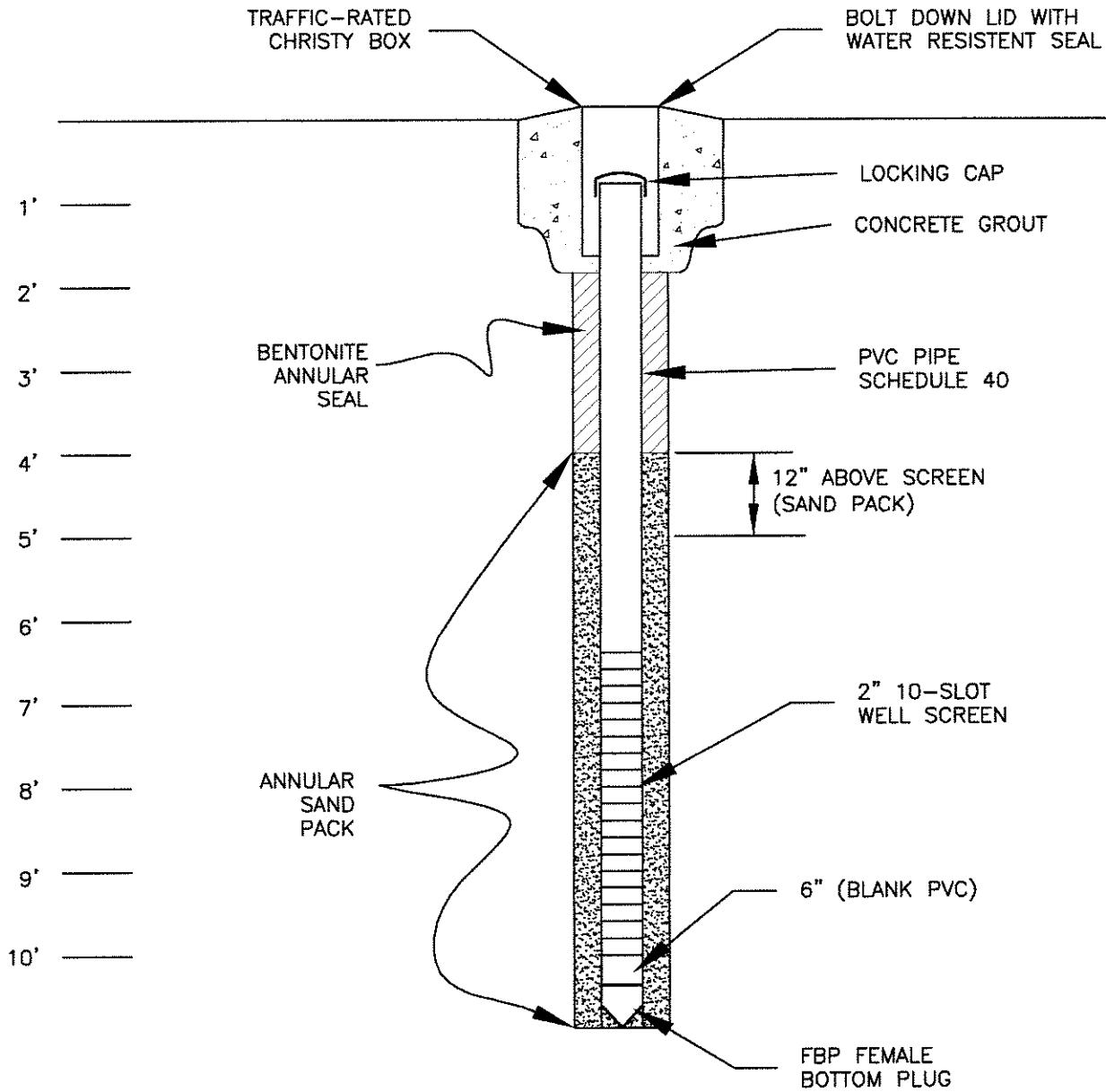
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	8
LOCATION	R. VILLAGE TEXACO	CHECK	<i>[Signature]</i>	JOB NO.
MONITORING WELL MW-8 (SCREENED 10 TO 15 feet bgs)	SCALE	AS SHOWN		4329.02





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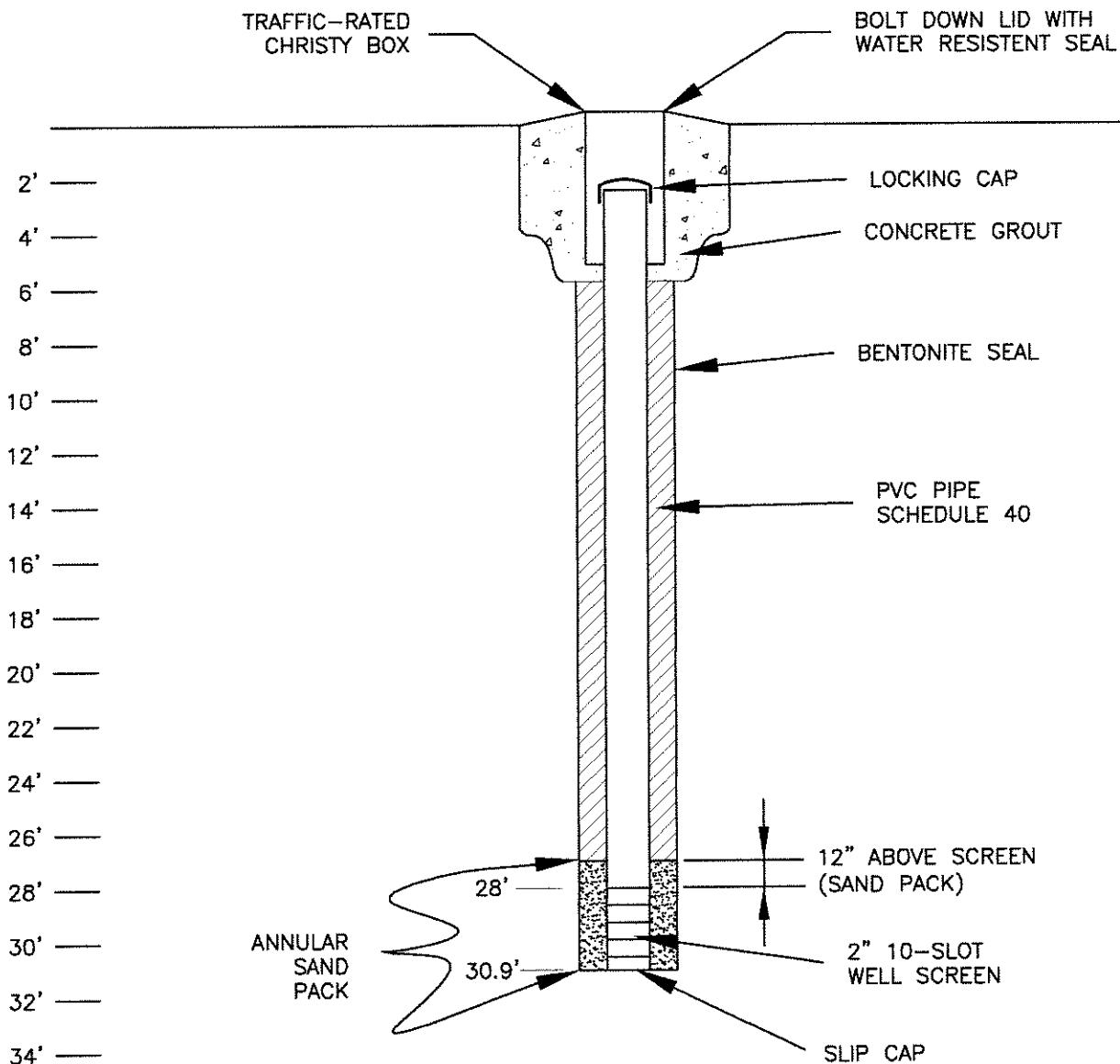
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	12/09/05	9
LOCATION	R. VILLAGE TEXACO	CHECK	<i>[Signature]</i>	JOB NO.
	MONITORING WELL MW-9 , MW-10, MW-11, MW-13,	SCALE	AS SHOWN	4329.02
	MW-14 & MW-15 (ALL SCREENED 5 TO 10 feet bgs)			





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21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

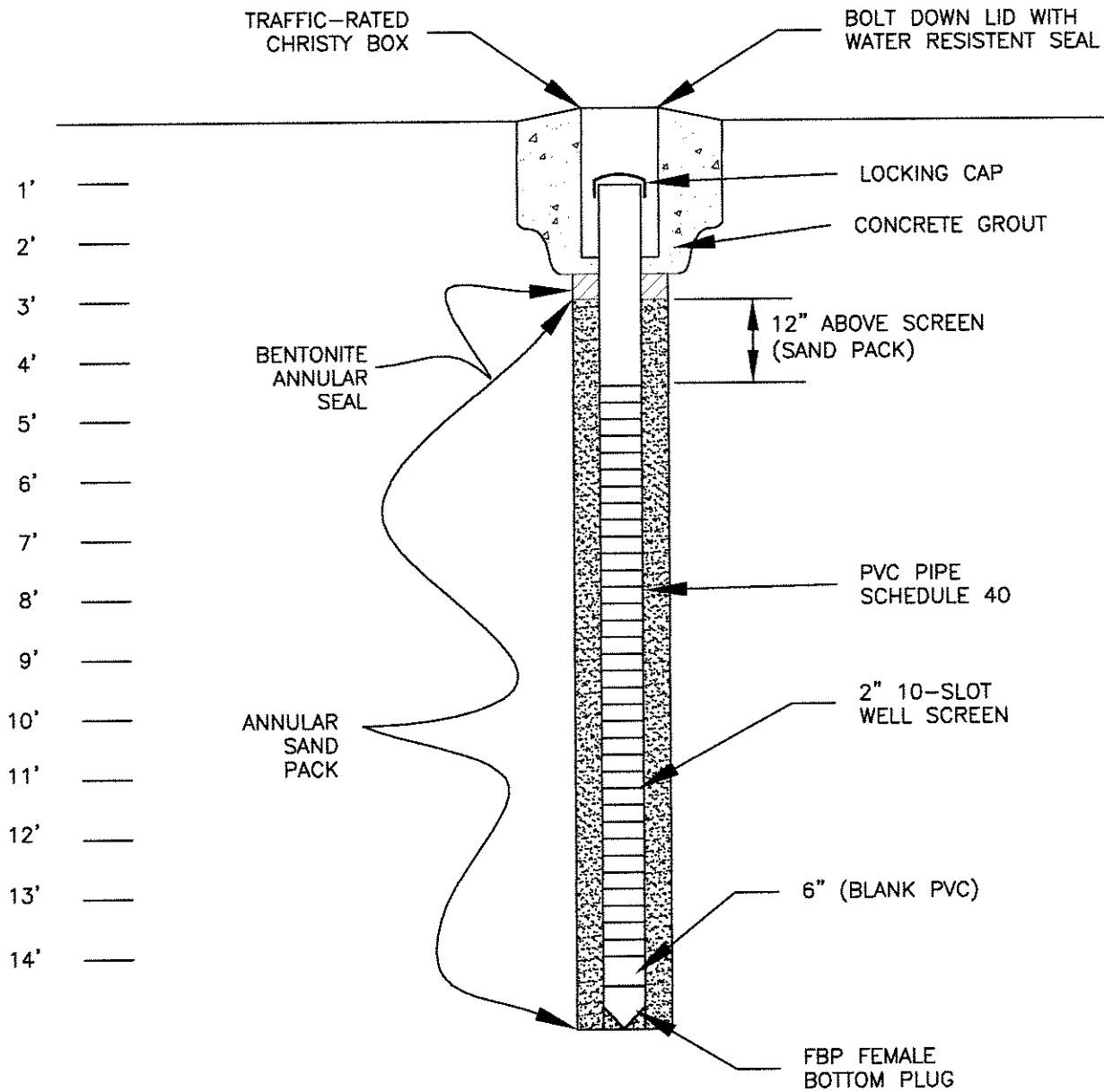
PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	12/12/05	10
LOCATION	R. VILLAGE TEXACO	CHECK	<i>cc</i>	JOB NO.
MONITORING WELL MW-12 (SCREENED 28 TO 30.9 feet bgs)	SCALE AS SHOWN			4329.02





LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	W & S ENVIRO	DATE	1/12/06	11
LOCATION	R. VILLAGE TEXACO	CHECK	<i>cc</i>	JOB NO.
	MONITORING WELL MW-16, MW-17, MW-18 &	SCALE	AS SHOWN	4329.02
	MW-19 (SCREENED 4 TO 14 feet bgs)			




 ALL RESULTS REPORTED IN
 MICROGRAMS PER LITER ($\mu\text{g/L}$)
 ND = BELOW DETECTION LIMITS
 NS = NOT SAMPLED



 DESTROYED MONITORING WELLS
 MONITORING WELL (SHALLOW)
 MONITORING WELL (DEEP)
 ALL RESULTS REPORTED IN
 MICROGRAMS PER LITER ($\mu\text{g}/\text{L}$)
 ND = BELOW DETECTION LIMITS
 NS = NOT SAMPLED

END

SCALE: 1" = 20'

SEWER

SEWER

ELECTRIC/WATER (NORCAL GEO. CONSULTANTS INC.)
ELECTRIC (NORCAL GEO. CONSULTANTS INC.)
SANITARY SEWER (NORCAL GEO. CONSULTANTS INC.)
STORM DRAIN (NORCAL GEO. CONSULTANTS INC.)
UNDIFFERENTIATED UTILITY (NORCAL GEO. CONSULTANTS INC.)

GROUNDWATER MONITORING REPORT
ANALYTE CONCENTRATIONS IN GROUNDWATER (11/02/2001)

05)
 SCALE 1:20
 DRAWN BY
 CHECKED
 APPROVED
 DATE

TABLE 1: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

Groundwater Measurements

Analytical Results

WELL/ Sample Date	Head (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Well Screen Interval (feet)	Depth to Bottom of Screen (feet)	TPHg ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	Lead Scengers ($\mu\text{g/L}$)	Other Analytes ($\mu\text{g/L}$)
MW-1 12/1/1998	8/1/2000	NA	3-10	0.67	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
MW-2 8/1/2000	8/25/1999	NA	3-10	0.67	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
MW-3 8/1/2000	8/25/1999	NA	16.51	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
MW-4 8/1/2000	72.21	NA	3-10	0.67	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
9/8/2000	63.12	9.09	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
10/12/2000	64.03	8.18	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
11/9/2000	64.64	7.57	510	61	ND<0.50	55	34	210	ND>10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
12/12/2000	64.16	8.05	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
1/8/2001	64.81	7.40	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
2/14/2001	66.56	5.65	2,800	88	ND<0.50	150	87.4	380	94	19	ND<1.0	ND<1.0	All others ND	All others ND
2/14/2001	66.56	5.65	2500	81	ND<0.50	140	79.4	340	100	17	ND<1.0	ND<1.0	All others ND	All others ND
2/14/2001	66.56	5.65	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
3/12/2001	66.79	5.42	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
4/6/2001	66.52	5.69	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
5/1/2001	66.41	5.80	1,300	120	ND<1	140	16	380	130	18	ND<1.0	All ND<2.5	All others ND	All others ND
6/8/2001	65.50	6.71	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
7/16/2001	66.21	6.00	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
8/24/2001	66.09	6.12	1,400	81	ND<1.3	78	40	650	290	36	3.4	All ND<2.5	All others ND	All others ND
9/7/2001	65.39	6.82	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
10/24/2001	64.62	7.59	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
11/5/2001	65.32	6.89	1,000	45	1.4	68	30.6	640	180	30	2.3	All ND<1.0	All others ND	All others ND
12/5/2001	66.48	5.73	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
1/3/2002	67.13	5.08	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
2/15/2002	66.63	5.58	1,700	8.5	ND<0.50	49	13	540	620	27	1.9	All ND<1.0	All others ND	All others ND
5/3/2002	66.63	5.58	1,900	7.4	ND<0.50	23	11.85	720	330	30	2.7	All ND<1.0	All others ND	All others ND
7/3/2002	66.26	5.95	1,700	21	0.77	72	36.2	650	230	32	2.6	All ND<1.0	All others ND	All others ND
12/5/2002	65.43	6.78	1,300	11	0.93	55	19.5	590	360	30	2.8	All ND<1.0	All others ND	All others ND
2/13/2003	62.68	9.53	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected	dry	no sample collected
5/21/2003	66.91	5.30	2,200	20	ND<0.50	64	16	670	220	34	2.6	All ND<1.0	All others ND	All others ND
8/6/2003	66.40	5.81	2,700	12	1.1	80	18.8	810	280	38	3.0	All ND<1.0	All others ND	All others ND
11/6/2003	65.83	6.38	2,500	8.1	ND<0.50	44	8.88	620	200	28	2.2	All ND<1.0	All others ND	All others ND
2/17/2004	66.91	5.30	2,000	12	ND<0.50	25	7.0	680	390	39	ND<6.0	—	All others ND	All others ND
5/14/2004	66.30	5.91	1,900	20	ND<0.50	41	9.8	630	180	34	2.6	—	All others ND	All others ND
8/30/2004	66.15	6.06	1,800	7.5	ND<0.50	29	4.8	650	350	39	2.8	—	ND<1.0	ND<1.0
10/22/2004	66.00	6.21	1,800	10	ND<0.50	39	5.7	690	ND<500	34	3.1	—	ND<1.0	ND<1.0
2/3/2005	66.94	5.27	2,000	6.9	ND<0.50	19	2.5	630	230	34	2.7	—	ND<1.0	ND<1.0
5/23/2005	66.83	5.38	1,900	5.9	ND<0.50	19	1.5	530	220	31	2.6	—	ND<1.0	ND<1.0
8/1/2005	66.34	5.87	1,700	5.7	ND<0.50	19	2.0	610	250	35	2.9	—	ND<1.0	ND<1.0
11/2/2005	65.90	6.31	2,200	4.5	ND<0.50	23	1.5	500	270	36	2.5	—	ND<1.0	ND<1.0

TABLE I: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco

W and S Enviro-R Village Texaco

W and S Enviro-R Village Texaco

Groundwater Measurements

TABLE 1: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco

723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 12551

Groundwater Measurements

Analytical Results

TABLE I: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco

723 South Florida Blvd, Fort Lauderdale

LACONIC 4320.02: LOG NO. 1758

LACO No. 4329.02; LUF No. 1233

Groundwater Measurements

Well Head Elevation (feet, NAVD-88)	WELL/ Sample Date	Hydraulic Head (feet)	Well Screen Interval (feet)	Depth to Water (feet)	Bottom of Screen (feet)	TPH _B ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	Total MTBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	Lead Scavengers ($\mu\text{g/L}$)	Other Analytics ($\mu\text{g/L}$)
MW-7 Continued																
\$15/2002 7/31/2002 12/5/2002 2/13/2003	46.37 NA NA NA	45.79 26.40 25.91 24.43	25.82 dry dry dry	26.40 no sample collected no sample collected no sample collected	ND>50 ND>50 ND>50 ND>0.50	ND>0.50 no sample collected no sample collected no sample collected	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
5/21/2003 8/6/2003 11/6/2003 2/11/2004	47.76 NA NA NA	NA NA NA NA	25.30 25.30 25.30 25.30	ND>50 no sample collected no sample collected no sample collected	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 no sample collected no sample collected no sample collected	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
5/14/2004 8/30/2004 11/22/2004 2/3/2005	50.14 NA NA NA	NA NA NA NA	25.30 25.18 25.16 25.16	ND>50 no sample collected no sample collected no sample collected no sample collected	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 no sample collected no sample collected no sample collected no sample collected	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND>0.50 ND>0.50 ND>0.50 ND>0.50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
8/1/2005 11/2/2005	46.01 47.03	NA NA	26.18 25.16	no sample collected no sample collected	ND>50 ND>50	ND>0.50 no sample collected	ND>0.50 ND>0.50	ND>0.50 ND>0.50	ND>0.50 ND>0.50	ND<1.0 ND<1.0	All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0			
11/2/2005	45.89	NA	26.30	no sample collected	ND>50	ND>0.50	ND>0.50	ND>0.50	ND>0.50	ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0		
MW-8																
8/11/2000 9/8/2000 10/12/2000 11/9/2000	60.53 58.22 58.22 58.22	14.98 14.98 14.98 14.98	11.77 14.08 14.08 14.08	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
12/12/2000 1/8/2001 2/4/2001 3/12/2001	58.22 58.24 58.22 58.22	14.08 14.06 14.08 14.08	14.08 14.06 14.08 14.08	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
4/6/2001 5/11/2001 6/8/2001 7/16/2001	58.21 NA 58.22 NA	14.09 dry 14.08 dry	14.09 dry 14.08 dry	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
8/20/2001 9/17/2001 10/24/2001	NA NA NA	dry dry dry	dry dry dry	ND>50 no sample collected	ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0			
11/5/2001 12/5/2001 1/3/2002 2/15/2002	NA NA NA NA	dry dry dry dry	dry dry dry dry	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
5/13/2002 5/31/2002 7/31/2002	58.19 58.19 58.18	14.09 14.11 14.12	14.09 14.11 14.12	ND>50 no sample collected	ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0			
12/5/2002 2/13/2003 5/21/2003 8/6/2003	57.96 58.16 57.98 57.87	14.34 14.14 14.32 14.43	14.34 14.14 14.62 14.51	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50	ND<1.0 ND<1.0 ND<1.0 ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0	ND<1.0 ND<1.0 ND<1.0 ND<1.0			
2/11/2004 5/14/2004 8/30/2004 11/22/2004 2/3/2005	57.65 57.70 57.66 57.68 57.70	14.65 14.60 14.64 14.62 14.60	14.65 14.60 14.64 14.62 14.60	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND<1.0 ND<1.0 ND<1.0 ND<1.0 no sample collected	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0 no sample collected	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0 no sample collected	ND<1.0 ND<1.0 ND<1.0 ND<1.0 no sample collected			
8/12/2005 11/22/2005	57.63 57.59	14.67 14.71	14.67 14.71	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND>50 no sample collected	ND>50 ND>50 ND>50 ND>50 no sample collected	ND<1.0 ND<1.0 ND<1.0 ND<1.0 no sample collected	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0 no sample collected	All ND<1.0 All ND<1.0 All ND<1.0 All ND<1.0 no sample collected	ND<1.0 ND<1.0 ND<1.0 ND<1.0 no sample collected			

TABLE I: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco
723 South Fortuna Blvd, Fortuna
LACO No. 4329.02; LOP No. 1255

Analytical Results														
Groundwater Measurements				Total Xylenes (µg/L)				Other Analytes (ng/L)						
WELL/ Sample Date	Hydraulic Head (feet)	Well Screen Interval (feet)	Depth to Water (feet)	Depth to Screen (feet)	TPH _E (ng/L)	Benzene (ng/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	MtBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	Lead (ng/L)	Scavengers (ng/L)
MW-9	71.60	5-10	8.90	11.77	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	All ND<1.0	All ND<1.0	
7/31/2002	59.83	62.14	9.46	9.42	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
12/25/2002	62.18	61.82	9.78	no sample collected	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
2/13/2003	8.6/2003	NA	dry	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
11/6/2003	NA	dry	dry	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
2/11/2004	NA	dry	9.90	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
5/14/2004	61.70	61.69	9.91	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
8/30/2004	61.71	61.71	9.89	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
11/22/2004	61.71	61.71	9.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	All ND<1.0	All ND<1.0	
2/3/2005	66.61	62.45	4.99	63	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	All ND<1.0	All ND<1.0	
5/23/2005	8/1/2005	62.11	9.49	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
MW-10	71.35	5-10	8.94	9.07	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	All ND<1.0	All ND<1.0	
7/31/2002	62.28	61.94	9.41	9.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
12/5/2002	62.33	62.51	8.84	9.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
2/13/2003	8.6/2003	62.27	no sample collected	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
5/21/2003	61.69	9.66	7.98	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
11/6/2003	63.37	62.29	9.06	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	All ND<1.0	All ND<1.0	
2/11/2004	5/14/2004	61.97	9.38	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
8/30/2004	61.73	62.62	7.35	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
11/22/2004	64.00	61.93	9.12	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
2/3/2005	62.18	9.17	9.51	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
5/23/2005	8/1/2005	61.84	9.51	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
MW-II	71.82	5-10	8.65	42.0	190	ND<0.50	0.67	12.5	32	ND<10	ND<1.0	ND<1.0	All ND<1.0	All ND<1.0
7/31/2002	62.86	62.49	9.33	no sample collected	120	15	ND<0.50	1.1	41	ND<50	ND<1.0	ND<1.0	All ND<1.0	All ND<1.0
12/5/2002	63.06	8.76	8.55	79	8.3	ND<0.50	0.58	0.70	26	ND<20	ND<1.0	ND<1.0	All ND<1.0	All ND<1.0
2/13/2003	63.27	62.31	9.61	73	1.8	ND<0.50	ND<0.50	ND<0.50	24	ND<20	ND<1.0	ND<1.0	All ND<1.0	All ND<1.0
5/21/2003	62.86	9.41	9.51	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
8/6/2003	62.41	62.21	9.61	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
11/6/2003	62.31	62.31	9.50	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
2/11/2004	5/14/2004	62.32	9.60	70	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.1	ND<20	ND<1.0	All ND<1.0	All ND<1.0	
8/30/2004	11/22/2004	67.02	65.66	6.16	ND<0.50	0.75	ND<0.50	0.52	9.5	ND<10	ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0
2/3/2005	5/23/2005	62.65	9.17	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	no sample collected
MW-12	72.44	28-30.9	39.73	29.23	no sample collected	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<1.0	ND<1.0	All ND<1.0	All ND<1.0
7/31/2002	43.21	42.50	29.94	26.20	46.24	5/21/2003	ND<50	ND<0.50	ND<0.50	ND<50	ND<20	ND<1.0	All ND<1.0	All ND<1.0
12/5/2002	52.07	47.76	24.68	28.37	44.07	8/6/2003	ND<50	1.4	0.68	2.17	ND<20	ND<1.0	All ND<1.0	All ND<1.0
2/13/2003	43.01	29.43	ND<0.50	ND<0.50	ND<0.50	11/6/2003	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<1.0	All ND<1.0	All ND<1.0

TABLE 1: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco

W and S Enviro-R Village Texaco

723 South Fortuna Blvd, Fortuna

LACO No. 4329.02; LOP No. 1255

Grundwasser-Messinstrumente

Well Head Elevation (feet)	Hydraulic Head (feet)	Depth to Screen (feet)	Depth to Bottom of Screen (feet)	TPHg ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)	Total MTBE ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	TAME ($\mu\text{g/L}$)	ETBE ($\mu\text{g/L}$)	Lead Scavengers ($\mu\text{g/L}$)	Other Analytes ($\mu\text{g/L}$)
MW-12 Continued														
2/11/2004	46.69	25.75	30.73	ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
5/14/2004	45.76	26.68		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/30/2004	43.20	29.24		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/22/2004	43.58	28.86		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
2/3/2005	46.01	26.43		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
5/21/2005	47.05	25.39		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/1/2005	47.00	25.44		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/2/2005	43.86	28.58		ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
MW-13														
7/31/2002	61.00	8.84	5.10	5,700	360	890	140	1,070	13	ND<10	ND<10	ND<10	All ND<1.0	All ND<1.0
12/5/2002	62.67	9.17		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<20	ND<80	ND<10	ND<10	All ND<1.0	All ND<1.0
2/13/2003	62.67	9.17		6,700	580	50	530	1,476	ND<20	ND<10	ND<10	ND<10	ND<10	ND<1.0
5/21/2003	62.26	9.58		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/6/2003	62.23	9.61		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/6/2003	62.24	9.60		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
2/11/2004	62.21	9.63		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
5/14/2004	62.24	9.60		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/30/2004	62.23	9.61		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/22/2004	62.25	9.59		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
2/3/2005	NA	dry		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
5/17/2005	67.00	4.84		420	3.5	ND<50	7.7	3.9	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/1/2005	63.06	8.78		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/2/2005	63.08	8.76		390	0.98	0.8	3.3	4.7	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
MW-14														
7/31/2002	63.58	5.10	8.73	ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
12/5/2002	62.73	9.33		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<20	ND<10	ND<10	ND<10	All ND<1.0	All ND<1.0
2/13/2003	63.01	9.05		580	83	7.9	28	36.4	8.2	ND<20	ND<10	ND<10	ND<1.0	ND<1.0
5/21/2003	62.45	9.61		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
8/6/2003	62.35	9.71		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
11/6/2003	62.35	9.71		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<10	ND<1.0
2/11/2004	NA	dry		64	ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
5/14/2004	63.04	9.02		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<25	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
8/30/2004	62.73	9.33		54	ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
11/22/2004	NA	dry		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
2/3/2005	62.44	9.62		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
5/23/2005	66.88	5.18		210	ND<50	ND<50	ND<50	ND<50	ND<50	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
8/1/2005	63.02	9.04		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<1.0
11/2/2005	62.68	9.38		no sample collected	no sample collected	no sample collected	no sample collected	no sample collected	ND<10	ND<10	ND<10	ND<10	ND<1.0	ND<1.0

TABLE I: GROUNDWATER ANALYTICAL RESULTS

W and S Enviro-R Village Texaco

723 South Fortuna Blvd, Fortuna

LACO No. 4329/02; LOP No. 12551

Groundwater Measurements

Analytical Results

WELL/ Sample Date	Head (feet, NAVD-88)	Hydraulic Head (feet, NAVD-88)	Well Screen Interval (feet)	Depth to Bottom of Screen (feet)	Depth to Water (feet)	TPH _g (ng/L.)	Benzene (ng/L.)	Toluene (ng/L.)	Ethylbenzene (ng/L.)	Total Xylenes (μg/L.)	MTBE (μg/L.)	TBA (μg/L.)	TAME (μg/L.)	ETBE (μg/L.)	Lead Scavengers (μg/L.)	Other Analytes (μg/L.)
MW-15	7/31/2002	63.16	9.39	no sample collected	9,900	1,100	1,300	310	1,710	45	ND<20	1.8	ND<1.0	ND<1.0-2.0	All others ND	
2/5/2002	62.82	5.55	8,000	270	4.7	850	791	24	ND<50	1.1	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
2/13/2003	66.66	6.54	6,400	100	4.1	480	257	14	ND<20	ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0	All ND<1.0	
5/21/2003	66.67	8.09	5,500	310	8.9	640	465	20	ND<20	1.1	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
8/6/2003	64.12	9.16	4,700	200	5.1	330	205	24	ND<20	1.2	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
11/6/2003	63.05	5.14	3,800	40	1.7	200	106	16	ND<30	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
2/11/2004	67.07	5.95	6,000	50	2.2	450	143	13	ND<10	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
5/14/2004	66.26	9.02	4,000	39	2.0	240	89	19	ND<25	1.2	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
8/30/2004	63.19	6.82	3,700	54	2.7	340	210	20	ND<70	1.2	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
11/22/2004	65.39	5.16	3,100	16	1.4	160	71	13	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
2/3/2005	67.05	5.42	3,300	9.7	1.0	81	ND<10	ND<15	ND<20	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
5/23/2005	66.79	6.45	4,300	41	1.8	75	223	ND<20	ND<1.0	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
8/1/2005	65.76	9.12	2,300	9.2	0.89	69	46	14	ND<45	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
MW-16	7/174	4.14	13.05	no sample collected	26	85	16	323	.36	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
8/30/2004	58.41	13.33	3,200	1,400	180	1,080	280	53	4.2	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
11/22/2004	58.02	13.72	9,800	180	22	300	980	72	ND<35	2.6	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
2/3/2005	61.22	10.52	4,300	120	4.3	160	242	24	ND<10	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
5/23/2005	60.15	11.59	2,400	71	1.7	120	129	130	ND<150	4.9	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
8/1/2005	58.00	13.74	1,900	---	---	---	---	---	---	---	---	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
11/2/2005	57.89	13.85	---	---	---	---	---	---	---	---	---	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
MW-17	71.50	4.14	13.03	no sample collected	---	---	---	---	---	---	---	---	---	---	---	---
8/30/2004	57.82	13.68	no sample collected	26	85	16	323	.36	ND<10	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	
11/22/2004	57.56	13.94	no sample collected	1,4	ND<50	3.3	8.0	190	83	7.3	ND<1.0	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0
2/3/2005	59.78	11.72	2,600	3,200	94.0	340.0	189.0	95	ND<60	3.7	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
5/23/2005	59.39	12.11	no sample collected	---	---	---	---	---	---	---	---	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
8/1/2005	57.80	13.70	---	---	---	---	---	---	---	---	---	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
11/2/2005	57.42	14.08	---	---	---	---	---	---	---	---	---	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW-18	71.83	4.14	13.10	no sample collected	---	---	---	---	---	---	---	---	---	---	---	---
8/30/2004	58.26	13.57	580	6.3	14	4.4	95	17	ND<10	1.6	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
11/22/2004	57.99	13.84	7,400	2,000	460	200	890	190	85	1.3	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
2/3/2005	59.81	12.02	2,400	220	27	72	560	23	ND<10	2.5	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
5/23/2005	66.58	5.25	5,600	28	5.2	160	194	ND<40	ND<30	3.4	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
8/1/2005	65.75	6.08	7,700	67	5.9	280	553	ND<40	ND<30	4.7	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
11/2/2005	58.84	12.99	3,500	190	5.5	80	177	55	19	4.7	ND<1.0	All ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0

Notes:

^{TPh_g} - total petroleum hydrocarbons as gasoline

Xylenes - total of m,p,xylenes and o-xylenes

Fuel oxygenates include:

MTBE - methyl tertiary butyl ether

ETBE - ethyl tertiary butyl ether

TAME - tertiary amyl methyl ether

TBA - tertiary butyl alcohol

DIPE - Diisopropyl ether

All results reported in micrograms per liter ($\mu\text{g/L}$)ND - not detect at the reporting limit shown ($\mu\text{g/L}$)

Bold results indicate analyte detection

... Not sampled

TABLE 2: HISTORIC HYDRAULIC GRADIENT DATA

W and S Enviro - R Village Texaco

723 South Fortuna Blvd, Fortuna

LACO No. 4329.02; LOP No. 12551

Date	Shallow Aquifer		Deep Aquifer	
	Direction	Slope	Direction	Slope
11/9/2000	NA	NA	NA	NA
12/12/2000	NA	NA	NA	NA
12/5/2002	S72°E	3.7%	NA	NA
2/13/2003	S82°W	6.1%	S50°W	5.5%
5/21/2003	S43°E	4.6%	S49°W	4.8%
8/6/2003	S43°W	4.4%	NA	NA
11/6/2003	S70°E	3.5%	NA	NA
2/11/2004	S42°E	4.6%	S49°W	6.6%
5/14/2004	S38°E	4.2%	S57°W	8.2%
8/30/2004	NA	NA	NA	NA
11/22/2004	S61°E	NA	NA	NA
2/3/2005	NA	NA	S50°W	7.7%
5/23/2005	N42°E	4.2%	S45°W	4.3%
8/1/2005	S20°E	3.1%	NA	NA
11/12/2005	NA	NA	NA	NA

Attachment 1



Project Name:	R Village Texaco		Tech:	SJD		
Project No.:	4329.02		Mob/Demob time:	50 / .50		
Date:	11-2-05		Travel time:	1.25		
Global ID No.:	T0602300415		Time on site:	11:20		
PM:	CJW		Time off site:	1:30		
WELL No.:	MW4	MW5	MW6	MW7	MW8	
DIAMETER (in)	2.00	2.00	2.00	2.00	2.00	
SCREENED INTERVAL (ft)	3-10	15-24.1	3-10	15-26.3	10-15	
DEPTH TO WATER (ft)	6.2	23.5	DRY	26.30	14.7	
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH					
	TEMP (°C)					
	Ecw (μohms)					
	ORP (mV)					
	DO (mg/L)					
OTHER (units)						
PURGE	TIME					
	METHOD (DHP/CB/B)					
	RATE (Lpm)					
	VOLUME (L)					
	COLOR		Cloudy	Cloudy		
	ODOR		SULFUR			
INTAKE DEPTH (FEET)						
SAMPLE	TIME	12:32				
	METHOD (DHP/CB/B)	3/4" B				
	ANALYTES	8260 List 1	8260 List 1	8260 List 5	MEASURE ONLY	MEASURE ONLY
	TOTAL DRAWDOWN (FEET)					
	REMARKS				NEW 2" CAP	
	WELL CONDITION	good	good	good	good	good
WASTE DRUMS						

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

REVISED:10/27/2005



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Project Name: R Village Texaco		Tech: SJD						
Project No.: 4329.02		Mob/Demob time: .50/.50						
Date: 11-2-05		Travel time: 1.25						
Global ID No.: T0602300415		Time on site: 11:20						
PM: CJW		Time off site: 11:30						
WELL No.: MW9		Mileage: 37						
DIAMETER (in) 2.00		MW10 2.00						
SCREENED INTERVAL (ft) 5-10		MW11 2.00						
DEPTH TO WATER (ft) 9.49		MW12 1.50						
MW13 2.00								
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH							
	TEMP (°C)							
	E _{cw} (μmhos)							
	ORP (mV)							
	DO (mg/L)							
OTHER (units)								
PURGE	TIME							
	METHOD (DHP/CB/B)							
	RATE (Lpm)							
	VOLUME (L)							
	COLOR	GREY/BRONZE TURRID →						
	ODOR	SULFUR						
INTAKE DEPTH (FEET)								
SAMPLE	TIME							12:48
	METHOD (DHP/CB/B)	3/4" B						
	ANALYTICS	MEASURE ONLY	MEASURE ONLY	MEASURE ONLY	MEASURE ONLY	8260 List 1		
	TOTAL DRAWDOWN (FEET)							
	REMARKS	TD = 9.79						
	WELL CONDITION	good	good	good	good	good		
WASTE DRUMS								

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

REVISED:10/27/2005



Project Name: R Village Texaco
Project No.: 4329.02
Date: 11-2-05
Global ID No.: T0602300415
PM: CJW

Tech: SJD
Mobe/Demob time: 1:50 / 1:50
Travel time: 1:25
Time on site: 11:20
Time off site: 1:30
Mileage: 37

	MW14	MW15	MW16	MW17	MW18
WELL No.:	2.00	2.00	2.00	2.00	2.00
DIAMETER (in)	5-10	5-10	4-14	4-14	4-14
SCREENED INTERVAL (ft)	9.38	9.12	13.85	14.08	12.99
DEPTH TO WATER (ft)					
FIELD INTRINSICS					
pH	INITIAL	FINAL	INITIAL	FINAL	INITIAL
TEMP (°C)					
E _{COW} (μmhos)					
ORP (mV)					
DO (mg/L)					
OTHER (units)					
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING					
PURGE TIME					
METHOD (DHP/CB/B)					
RATE (Lpm)					
VOLUME (L)					
COLOR	LT. GREY TURBID	TURBID			LT. GREY med. GREY TURBID
ODOR	FUEL / RUBBER				LIGHT RUBBER/FUEL
INTAKE DEPTH (FEET)					
SAMPLE TIME		12:59			1:15
METHOD (DHP/CB/B)		3/4" B			3/4" B
ANALYTICS	8260 List 1	8260 List 1	8260 List 1	8260 List 1	8260 List 1
TOTAL DRAWDOWN (FEET)					
REMARKS	TD = 9.75 MUD @ BOTTOM	NO SAMPLE	TD = 9.85 WATER LEVEL @ BOTTOM OF WELL	TD = 14.15	
WELL CONDITION	good	good	good	good	good
WASTE DRUMS					



Project Name: R Village Texaco		Tech: SJD/RJD					
Project No.: 4329.02		Mob/Demob time: 50/25					
Date: 11-2-05		Travel time: 50					
Global ID No.: T0602300415		Time on site: 10:45					
PM: CJW		Time off site: 11:30					
Mileage: 36							
WELL No.:	MW4	MW5	MW6	MW7	MW8		
DIAMETER (in)	2.00	2.00	2.00	2.00	2.00		
SCREENED INTERVAL (ft)	3-10	15-24.1	3-10	15-26.3	10-15		
DEPTH TO WATER (ft)	6.37	23.53	DRY	26.30	14.77		
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	
	pH	6.0	5.4				
	TEMP (°C)	14.8	16.5				
	Ecw (μohms)	405	231				
	ORP (mV)	46	60				
	DO (mg/L)	4.74	0.78				
OTHER (units)							
PURGE	TIME	12:35	12:43				
	METHOD (DHP/CB/B)	DHP					
	RATE (Lpm)	0.25					
	VOLUME (L)	2.0					
	COLOR	clear	clear				
	ODOR	med. RUSTIC					
INTAKE DEPTH (FEET)	9.0						
SAMPLE	TIME	12:45					
	METHOD (DHP/CB/B)	DHP					
	ANALYTES	8260 List 1	8260 List 1	8260 List 5	MEASURE ONLY		MEASURE ONLY
	TOTAL DRAWDOWN (FEET)	0.67					
	REMARKS						
WELL CONDITION	Good	Good	Good	INSTALLED NEW CAP/SEAL		Good	
WASTE DRUMS							

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



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Project Name: R Village Texaco
Project No.: 4329.02
Date: 11-2-05
Global ID No.: T0602300415
PM: CJW

Tech: SJD/RKD
Mob/Demob time: 50.25
Travel time: .50
Time on site: 10:45
Time off site: 1:30
Mileage: 36

WELL No.:	MW9	MW10	MW11	MW12	MW13	
DIAMETER (in)	2.00	2.00	2.00	1.50	2.00	
SCREENED INTERVAL (ft)	5-10	5-10	5-10	28-30.9	5 - 10	
DEPTH TO WATER (ft)	9.49	9.51	9.17	28.55	8.76	
FIELD INTRINSICS		INITIAL	FINAL	INITIAL	FINAL	
pH						
TEMP (°C)						
Ecw (μmhos)						
ORP (mV)						
DO (mg/L)						
OTHER (units)						
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING						
PURGE	TIME					
METHOD (DHP/CB/B)						
RATE (Lpm)						
VOLUME (L)						
COLOR						
ODOR						
INTAKE DEPTH (FEET)						
SAMPLE	TIME					
METHOD (DHP/CB/B)						
ANALYTES	MEASURE ONLY	MEASURE ONLY	MEASURE ONLY	MEASURE ONLY	8260 List 1	
TOTAL DRAWDOWN (FEET)						
REMARKS	_____	_____	_____	_____		
WELL CONDITION	Good	Good	Good	Good		
WASTE DRUMS						

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED

REVISED:10/27/2005



Project Name: R Village Texaco		Tech: SJD / RJD						
Project No.: 4329.02		Mobe/Demobe time: 5/1/25						
Date: 11-2-05		Travel time: .50						
Global ID No.: T0602300415		Time on site: 10:45						
PM: CJW		Time off site: 11:30						
WELL No.: MW14		Mileage: 36						
DIAMETER (in) 2.00		MW15 2.00						
SCREENED INTERVAL (ft) 5-10		MW16 4-14						
DEPTH TO WATER (ft) 9.35		MW17 4-14						
MW18 4-14								
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
	pH							
	TEMP (°C)							
	ECD (μmhos)							
	ORP (mV)							
	DO (mg/L)							
	OTHER (units)							
PURGE	TIME							
	METHOD (DHP/CB/B)							
	RATE (Lpm)							
	VOLUME (L)							
	COLOR							
	ODOR							
	INTAKE DEPTH (FEET)							
SAMPLE	TIME							1:15
	METHOD (DHP/CB/B)							3/4" B
	ANALYTES	8260 List 1	8260 List 1	8260 List 1	8260 List 1	8260 List 1	8260 List 1	
	TOTAL DRAWDOWN (FEET)							
	REMARKS							
	WELL CONDITION	Good	Good	Good	Good	Good	Good	
	WASTE DRUMS							

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



LACO ASSOCIATES

CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501
TEL 707.443.5054
FAX 707.443.0553

Project Name: REDWOOD VILLAGE TECMO
Project No.: 4829-02

Tech: RWD
Date: 11-2-05



LACCO ASSOCIATES

CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501

TEL 707.443.5054

FAX 707.443.0553

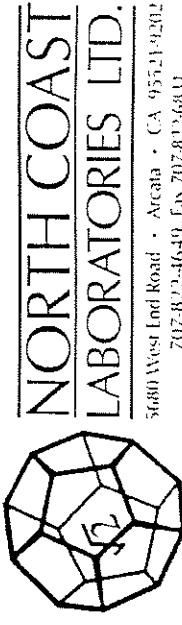
Project Name:

REDWOOD VILLAGE TEXACO

Tech: RLP/JJD

Date: 11-2-05

Project No.: 4329.07



**NORTH COAST
LABORATORIES LTD.**

5600 West Lnd Road • Arcata • CA 95521-9201
707-822-4649 Fax 707-822-6411

Chain of Custody

LABORATORY NUMBER:

Attention: Accounts Payable
Results & Invoice to: Laco Associates
Address: 21 W. 4th St. Eureka CA 95501
Phone: (707) 443-5054
Copies of Report to: LACO ; Chris Watt
Sampler (Sign & Print): SJD

PROJECT INFORMATION

Project Number: 4329.02
Project Name: HPI - R Village Texaco
Purchase Order Number: task 3e31

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*
✓	4329-MW4-W	1/2-05	AM	GW
✓	4329-MW5-W			
✓	4329-MW13-W			
✓	4329-MW15-W			
✓	4329-MW18-W			
✓	4329-QCTB-W			
			PM	✓

RELINQUISHED BY (Sign & Print)

RECEIVED BY (Sign)
DATE/TIME

DATE/TIME

SAMPLE DISPOSAL

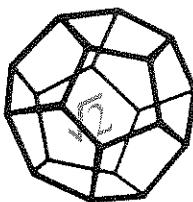
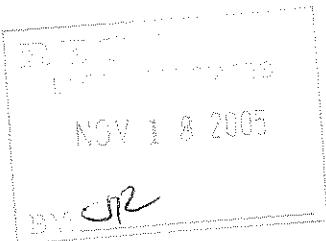
✓ NCL Disposal of Non-Contaminated
Return Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Fx Fed-Ex Bus Hand

* MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 2



NORTH COAST
LABORATORIES LTD.

November 17, 2005

LACO Associates
P.O. Box 1023
Eureka, CA 95502

Attn: Accounts Payable

RE: 4329.02, HPI-R Village Texaco

Order No.: 0511066
Invoice No.: 54361
PO No.: TASK 3031
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	4329-MW4-W
02A	4329-MW5-W
03A	4329-MW13-W
04A	4329-MW15-W
05A	4329-MW18-W
06A	4329-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

LMO _____
DRG _____
DNL _____
GH _____
GEO _____
HPI _____
CJW _____

File _____
Project # _____

REPORT CERTIFIED BY

Colleen Blackstone (BSR) _____ *R. G. Wood* _____

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr. _____

Jesse G. Chaney, Jr.
Laboratory Director

CLIENT: LACO Associates
Project: 4329.02, HPI-R Village Texaco
Lab Order: 0511066

CASE NARRATIVE**Gasoline Components/Additives:**

Sample 4329-MW13-W does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

The gasoline values for samples 4329-MW4-W, 4329-MW15-W and 4329-MW18-W include the reported gasoline components and additives in addition to other peaks in the gasoline range.

Some reporting limits were raised for sample 4329-MW15-W due to matrix interference.

Date: 17-Nov-05
WorkOrder: 0511066

ANALYTICAL REPORT

Client Sample ID: 4329-MW4-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-01A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	500	50	µg/L	50		11/15/05
Tert-butyl alcohol (TBA)	270	10	µg/L	1.0		11/16/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/16/05
Ethyl tert-butyl ether (ETBE)	2.5	1.0	µg/L	1.0		11/16/05
Benzene	4.5	0.50	µg/L	1.0		11/16/05
Tert-amyl methyl ether (TAME)	30	1.0	µg/L	1.0		11/16/05
Toluene	ND	0.50	µg/L	1.0		11/16/05
Ethylbenzene	23	0.50	µg/L	1.0		11/16/05
m,p-Xylene	1.5	0.50	µg/L	1.0		11/16/05
o-Xylene	ND	0.50	µg/L	1.0		11/16/05
Surrogate: 1,4-Dichlorobenzene-d4	102	80.8-139	% Rec	1.0		11/16/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,200	50	µg/L	1.0		11/16/05

Client Sample ID: 4329-MW5-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-02A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		11/16/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		11/16/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/16/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		11/16/05
Benzene	ND	0.50	µg/L	1.0		11/16/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		11/16/05
Toluene	0.94	0.50	µg/L	1.0		11/16/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/16/05
m,p-Xylene	ND	0.50	µg/L	1.0		11/16/05
o-Xylene	ND	0.50	µg/L	1.0		11/16/05
Surrogate: 1,4-Dichlorobenzene-d4	106	80.8-139	% Rec	1.0		11/16/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		11/16/05

Date: 17-Nov-05
WorkOrder: 0511066

ANALYTICAL REPORT

Client Sample ID: 4329-MW13-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-03A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		11/16/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		11/16/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/16/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		11/16/05
Benzene	0.98	0.50	µg/L	1.0		11/16/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		11/16/05
Toluene	0.80	0.50	µg/L	1.0		11/16/05
Ethylbenzene	3.3	0.50	µg/L	1.0		11/16/05
m,p-Xylene	2.5	0.50	µg/L	1.0		11/16/05
o-Xylene	2.2	0.50	µg/L	1.0		11/16/05
Surrogate: 1,4-Dichlorobenzene-d4	109	80.8-139	% Rec	1.0		11/16/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	390	50	µg/L	1.0		11/16/05

Client Sample ID: 4329-MW15-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-04A

Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	14	1.0	µg/L	1.0		11/15/05
Tert-butyl alcohol (TBA)	ND	45	µg/L	1.0		11/15/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/15/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		11/15/05
Benzene	9.2	0.50	µg/L	1.0		11/15/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		11/15/05
Toluene	0.89	0.50	µg/L	1.0		11/15/05
Ethylbenzene	69	0.50	µg/L	1.0		11/15/05
m,p-Xylene	38	0.50	µg/L	1.0		11/15/05
o-Xylene	7.9	0.50	µg/L	1.0		11/15/05
Surrogate: 1,4-Dichlorobenzene-d4	104	80.8-139	% Rec	1.0		11/15/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	2,300	50	µg/L	1.0		11/15/05

Date: 17-Nov-05
WorkOrder: 0511066

ANALYTICAL REPORT

Client Sample ID: 4329-MW18-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-05A Matrix: Groundwater

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	55	1.0	µg/L	1.0		11/15/05
Tert-butyl alcohol (TBA)	19	10	µg/L	1.0		11/15/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/15/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		11/15/05
Benzene	190	10	µg/L	20		11/15/05
Tert-amyl methyl ether (TAME)	4.7	1.0	µg/L	1.0		11/15/05
Toluene	5.5	0.50	µg/L	1.0		11/15/05
Ethylbenzene	80	0.50	µg/L	1.0		11/15/05
m,p-Xylene	150	10	µg/L	20		11/15/05
o-Xylene	27	0.50	µg/L	1.0		11/15/05
Surrogate: 1,4-Dichlorobenzene-d4	104	80.8-139	% Rec	1.0		11/15/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	3,500	50	µg/L	1.0		11/15/05

Client Sample ID: 4329-QCTB-W

Received: 11/3/05

Collected: 11/2/05 0:00

Lab ID: 0511066-06A Matrix: Trip Blank

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		11/15/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		11/15/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		11/15/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		11/15/05
Benzene	ND	0.50	µg/L	1.0		11/15/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		11/15/05
Toluene	ND	0.50	µg/L	1.0		11/15/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/15/05
m,p-Xylene	ND	0.50	µg/L	1.0		11/15/05
o-Xylene	ND	0.50	µg/L	1.0		11/15/05
Surrogate: 1,4-Dichlorobenzene-d4	107	80.8-139	% Rec	1.0		11/15/05

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		11/15/05

North Coast Laboratories, Ltd.

Date: 17-Nov-05

QC SUMMARY REPORT

Method Blank

CLIENT:	LACO Associates
Work Order:	0511066
Project:	4329.02, HPI-R Village Texaco

Sample ID	Batch ID	Test Code	Units:	Analysis Date	Prep Date					
Client ID:		Run ID:	µg/L	SeqNo:						
Analyte	Result	Limit	SPK value	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
Tert-butyl alcohol (TBA)	ND	10								
Di-isopropyl ether (DIPE)	ND	1.0								
Ethyl tert-butyl ether (ETBE)	ND	1.0								
Benzene	ND	0.50								
Tert-amyl methyl ether (TAME)	ND	1.0								
Toluene	ND	0.50								
Ethylbenzene	0.09259	0.50								J
m,p-Xylene	0.1851	0.50								J
o-Xylene	ND	0.50								
1,4-Dichlorobenzene-d4	1.06	0.10	1.00	0	106%	81	139	0		
Sample ID	Batch ID	Test Code	Units:	Analysis Date	Prep Date					
Client ID:		Run ID:	µg/L	SeqNo:						
Analyte	Result	Limit	SPK value	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH-C Gasoline	20.21	50								J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 17-Nov-05

CLIENT: LACO Associates

Work Order: 0511066

Project: 4329.02, HPI-R Village Texaco

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-05730	Batch ID:	R38071	Test Code:	8260OXYW	Units: µg/L	Analysis Date: 11/15/05 2:45:00 AM			Prep Date
Client ID:		Run ID:	ORGCMS3_051115B	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Analyte		Result	Limit	SPK value	SPK Ref Val					
Methyl tert-butyl ether (MTBE)	18.13	1.0	20.0	0	90.6%	80	120	0	0	
Tert-butyl alcohol (TBA)	374.1	10	400	0	93.5%	25	162	0	0	
Di-isopropyl ether (DIPE)	18.24	1.0	20.0	0	91.2%	80	120	0	0	
Ethyl tert-butyl ether (ETBE)	18.02	1.0	20.0	0	90.1%	77	120	0	0	
Benzene	19.24	0.50	20.0	0	96.2%	78	117	0	0	
Tert-amyl methyl ether (TAME)	17.91	1.0	20.0	0	89.6%	64	136	0	0	
Toluene	19.67	0.50	20.0	0	98.3%	80	120	0	0	
Ethylbenzene	18.95	0.50	20.0	0	94.8%	80	120	0	0	
m,p-Xylene	38.31	0.50	40.0	0	95.8%	80	120	0	0	
o-Xylene	18.08	0.50	20.0	0	90.4%	80	120	0	0	
1,4-Dichlorobenzene-d4	1.12	0.10	1.00	0	112%	81	139	0	0	
Sample ID	LCS-05730	Batch ID:	R38071	Test Code:	8260OXYW	Units: µg/L	Analysis Date: 11/15/05 10:27:00 AM			Prep Date
Client ID:		Run ID:	ORGCMS3_051115B	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Analyte		Result	Limit	SPK value	SPK Ref Val					
Methyl tert-butyl ether (MTBE)	17.36	1.0	20.0	0	86.8%	80	120	18.1	4.31%	20
Tert-butyl alcohol (TBA)	364.1	10	400	0	91.0%	25	162	374	2.70%	20
Di-isopropyl ether (DIPE)	17.71	1.0	20.0	0	88.5%	80	120	18.2	2.95%	20
Ethyl tert-butyl ether (ETBE)	16.75	1.0	20.0	0	83.7%	77	120	18.0	7.32%	20
Benzene	19.09	0.50	20.0	0	95.5%	78	117	19.2	0.787%	20
Tert-amyl methyl ether (TAME)	16.45	1.0	20.0	0	82.2%	64	136	17.9	8.54%	20
Toluene	19.89	0.50	20.0	0	99.4%	80	120	19.7	1.13%	20
Ethylbenzene	18.58	0.50	20.0	0	92.9%	80	120	19.0	1.97%	20
m,p-Xylene	38.65	0.50	40.0	0	96.6%	80	120	38.3	0.903%	20
o-Xylene	17.33	0.50	20.0	0	86.6%	80	120	18.1	4.26%	20
1,4-Dichlorobenzene-d4	1.15	0.10	1.00	0	115%	81	139	1.12	2.65%	20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT
Laboratory Control Spike

CLIENT: LACO Associates
Work Order: 0511066
Project: 4329.02, HPI-R Village Texaco

Sample ID	Batch ID:	Test Code:	Units:	Analysis Date: 11/15/05 4:02:00 AM			Prep Date				
Client ID:		Run ID:	µg/L	SeqNo:	547993						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gasoline	913.6	50	1,000	0	91.4%	80	120	0			
Sample ID	Batch ID:	Test Code:	Units:	Analysis Date: 11/15/05 10:52:00 AM			Prep Date				
Client ID:		Run ID:	µg/L	SeqNo:	547999						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gasoline	881.7	50	1,000	0	88.2%	80	120	914	3.55%	20	

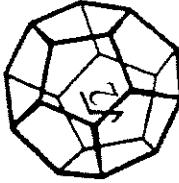
Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



NORTH COAST
LABORATORIES LTD.

5640 West End Road • Arcata • CA 95521-9702
707.822.4649 fax 707.822.6811

Chain of Custody

Attention: Accounts Payable	Results & Invoice to: Laco Associates	Address: 21 W. 4th St. Eureka CA 95501
Phone: (707) 443-5054	Copies of Report to: LACO ; Chris Watt	
	Sampler (Sign & Print): <u>Samper</u>	
PROJECT INFORMATION		
Project Number: <u>4329.02</u>	Project Name: <u>HPI - R Village Texaco</u>	Purchase Order Number: <u>task 3031</u>

TAT: 24 Hr 48 Hr 5 Day 5 Day 5 Day	STD (2-3 Wk) Other: _____	PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES
REPORTING REQUIREMENTS: State Forms		
Preliminary: FAX ✓ Verbal By: _____	Final Report: FAX Verbal By: _____	
CONTAINER CODES: 1—1/2 gal. pt; 2—250 ml pt; 3—500 ml pt; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other		
PRESERVATIVE CODES: a—HNO ₃ ; b—HCl; c—H ₂ SO ₄ ; d—Na ₂ S ₂ O ₃ ; e—NaOH; f—C ₂ H ₅ Cl; g—other		
SAMPLE CONDITION/SPECIAL INSTRUCTIONS		
GEOTRACKER		

SAMPLE DISPOSAL		Y/N	
Y NCL Disposal of Non-Contaminated		Y/N/NA	
<input type="checkbox"/> Return	<input type="checkbox"/> Pickup	<input type="checkbox"/> Hand	<input type="checkbox"/> Mail
CHAIN OF CUSTODY SEALS		Y/N/NA	
SHIPPED VIA: UPS		Air-Ex	
Fed-Ex		Bus	

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.